



American Dynamics

A Tyco International Company

User Guide

**ADST-E1 Single Channel Video Encoder
Version 1.0**

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Technical Specifications

Preface

Thanks for purchasing our ADST-E1 single channel video encoder. Read this manual carefully before using the product and keep it well for future use.

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How to Use this Manual

ADST-E1 Single Channel Video Encoder User Guide mainly includes the product design, installation, configuration and technical specification. This manual includes the following chapters:

Chapter 1, Introduction

Provides description about product design, LEDs and connectors.

Chapter 2, Installation

Describes installation methods of ADST-E1.

Chapter 3, Pre Web Configuration

Describes Preparation for Web configuration.

Chapter 4, Web Configuration

Describes Web configuration of ADST-E1.

Chapter 5, Technical Specifications

Describes technical specification of ADST-E1.

Finding More Information

You can access ADST-E1 manuals and online Help for more information about ADST-E1.

Manuals

You can access manual by clicking FAQ from the **Web** menu bar.

Coventions

This guide uses the following text formats and symbols.

Convention	Meaning
Bold	<p>This font indicates screen elements, and also indicates when you should take a direct action in a procedure:</p> <ul style="list-style-type: none">– A command or character to type– A button or option on the screen to press, or– A key on your keyboard to press– A screen element or name <p>Multilevel menu is separated by “ / “. For example, Video&Audio/Video H264 indicates the submenu, Video H264 of the Video&Audio menu.</p>

The following items are used to indicate important information:

Note

Indicates necessary complementary description for performing a task.

Overview

ADST-E1 single channel video encoder (hereafter referred to as Video Encoder), which is based on TI latest platform, offers dual streaming of H.264 and MJPEG. It supports real-time coding for multiple resolutions and data transmission of unicast/multi-cast streaming, and also offers USB interface and SD/SDHC card slot for local storage.

The video encoder is available in two ways:

- Power over Ethernet (POE), and
- Power supply (PS).

ADST-E1 converts video from analog cameras and domes into a network compatible IP signal. It can be integrated into VideoEdge NVR 4.0 and also can be viewed, managed and monitored by Tyco Victor unified video management system.

Features

Connections

ADST-E1 has the following physical connections:

- 1 channel composite video input interface
- 1 RS485/RS422 connector for dome control
- 1 RS232 port for debugging
- 2 alarm in and 2 alarm out
- 1 audio input
- 1 audio output
- 1 RJ45 network connector
- 1 USB port
- 1 SD slot
- 1 resistor switch(75ohm)
- 1 power socket

Compression Standard

ADST-E1 supports standard video compression of H.264 and MJPEG.

Frame Rates

ADST-E1 supports a maximum of 25 (PAL) images per video channel. The maximum frame rate for H264 and MJPEG can be set respectively in **Web** page.

Resolutions

Table 1-1 Resolution

Resolution	PAL
D1	720x576 pixels
4CIF	704x576 pixels
2CIF	704x288 pixels
CIF	352x288 pixels
VGA	640x480 pixels
QVGA	320x240 pixels

Video Loss Detection

In the event of video loss, an alarm is generated. The alarm is automatically cleared when the video is restored.

Bandwidth Throttling

The maximum bandwidth for H.264 is selectable between 128kbps~4000kbps.

Advanced Features

- PTZ control with RS485/422.
- The following protocols are supported:
 - AD RS422
 - Pelco P
 - Pelco D

Web Configuration

You can configure and view live video using ADST-E1 Web page. Refer to Web Configuration on page 17 for more information.

Product Design

Front Panel

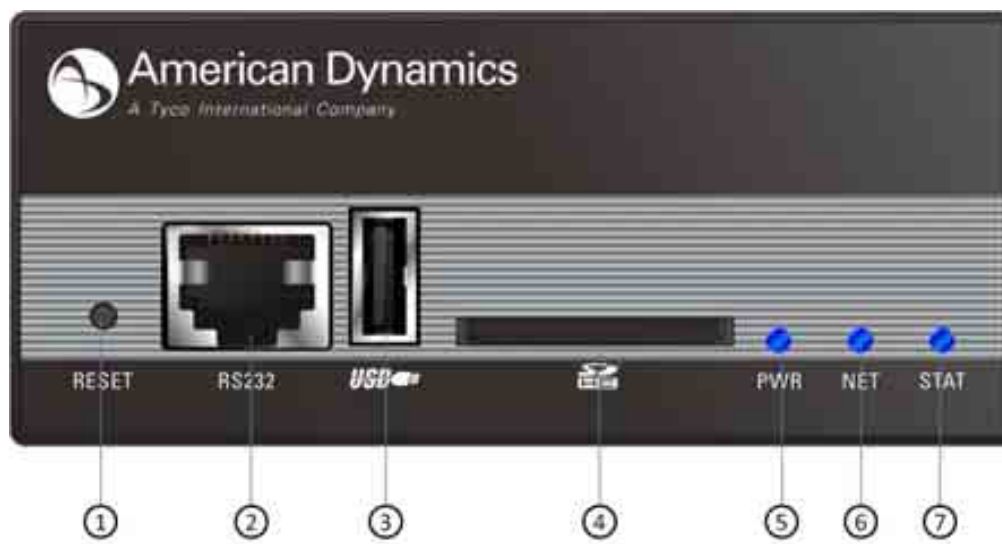


Figure 1-1 Front view

Table 1-2 Definitions of Connectors and LEDs on the front panel

No.	Connectors/LED	Description
1	RESET	Reset button. Supply power after power off and long press this button till the STAT LED flashes slowly (about 15 seconds). When slow flashes become normal flashes, the factory default is restored, including IP address.
2	RS232	RS232 port, used for debugging.
3	USB port	Connects to USB devices, such as U-disk. Portable hard disk is not supported now.
4	SD slot	Connects to SD card.
5	PWR LED	On: Power on Off: Power off
6	NET LED	On: Network is connected Flashing: traffic on the network Off: Network is disconnected
7	STAT LED	Normal flashing (2.5times/sec): normal operation Slowly flashing (1time/sec): occurs when press long the Reset button Rapidly flashing: firmware updating Often bright: system starting Off: Device error

Rear Panel



Figure 1-2 Rear View

Table 1-3 Definition of Connectors on Rear Panel

No.	Interfaces	Descriptions
1	AUDIO OUT	Audio output port (3.5mm)
2	AUDIO IN	Audio input port(3.5mm)
3	VIDEO IN	Composite video input (PAL) BNC port
4	Termination resistor swich(75ohm)	Open/Close
5	I/O	Provides RS485/422 interface, SensorNet interface, 2 ALARM IN and 2 ALARM OUT. Refer to Connector Pin Definitions on page 4 for more information.
6	NETWORK	10/100 BaseT; auto-adaptive, PoE optional.
7	POWER	Power supply, 12V(DC)

Connector Pin Definitions

Table 1-4 I/O Connectors & Pins Definitions

Pin	Description	Pin	Description
A1	IN1, ALARM IN1	B1	Tx+, RS-4221_A/RS-485_A
A2	IN2, ALARM IN2	B2	Tx-,RS-4222_B/RS-485_B
A3	COM, ALARM IN COM	B3	Rx+,RS-4223_A
A4	COM1, RELAY01	B4	Rx-, RS-4224_B
A5	OUT1, RELAY01	B5	+, SENSORNET_HT

A6	COM2, RELAY02	B6	-, SENSORNET_LO
A7	OUT2,RELAY02	B7	N/A

Table 1-5 RS232 Pins Definitions

Pin	Description	Pin	Description
1	Not Used	5	Tx
2	Not Used	6	CTS
3	RTS	7	GND
4	Rx	8	Not Used

Interface Connection

The following is interface connection diagram. The interface and the associated devices need connecting are as per site requirements from customers.



Package Contents

- 1 ADST-E1 single channel video encoder
- 1 set installation accessories, including install bracket (2pcs), M3 screws (8pcs), terminal block (2pcs)
- 1 Quick Start Guide

The ADST-E1 video encoder can be rack mounted, jack mounted or desk mounted.

The method of installing the ADST-E1 video encoder will vary depending on the type of its working models, i.e Power over Ethernet (PoE) or Power Supply (PS), and the network configuration of the installation environment. The two standard methods of installing the ADST-E1 are:

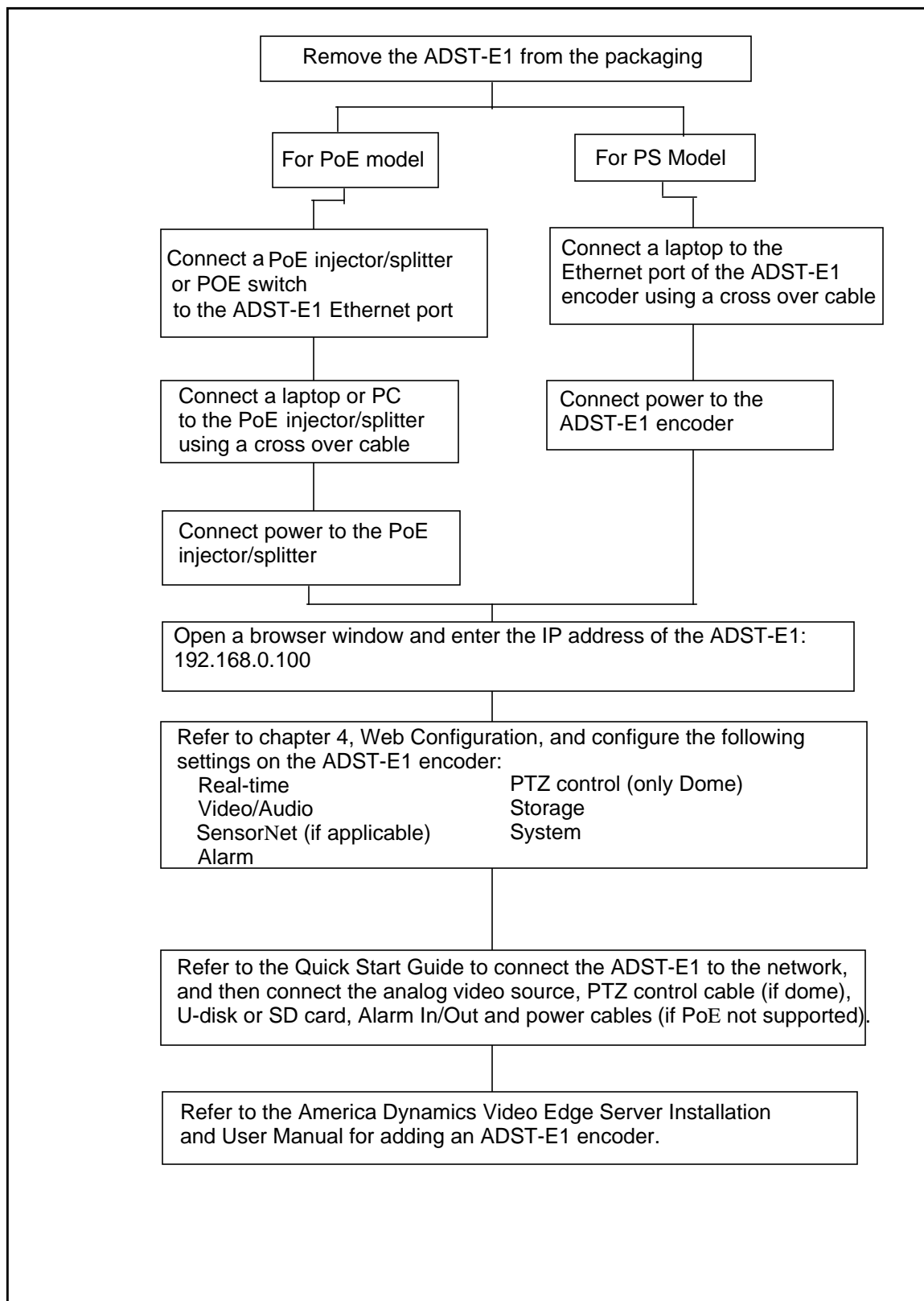
- Method A-Pre-configuration of ADST-E1;

Pre-configuration of ADST-E1 occurs before physical installation to the network. This method is suited to larger installations where a number of ADST-E1 video encoders are to be installed on the same site at the same time. In this case, the ADST-E1 should be configured so as to have their own network settings and identification, which provides Victor a easier identification.

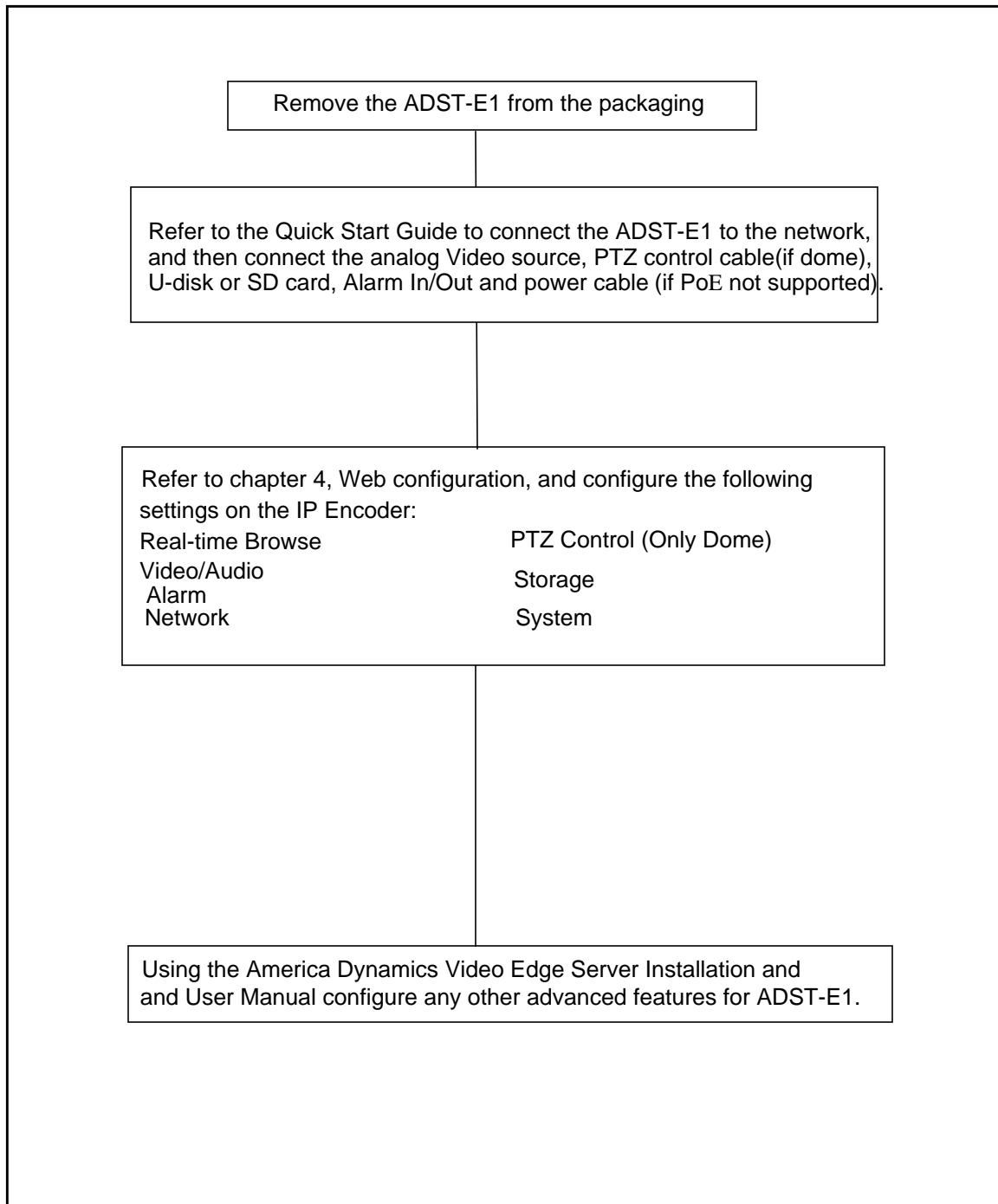
- Method B-Post-configuration of ADST-E1

Post-configuration of the ADST-E1 video encoder occurs after physical installation to the network. This method is suited to smaller network or where only one ADST-E1 video encoder is being added and configured at one time.

Installation Method A-Pre-configuration



Installation Method B-Post-installation configuration



2

Note

When using installation method B, only the ADST-E1 with the default settings should be powered up and added to the network at a time.

Pre Web Configuration

ADST-E1 video encoder has built-in Web service for customers to manage and maintain device through Web page.

At this release, the supported web browsers are as follows:

- Microsoft Internet Explorer 6.x
- Microsoft Internet Explorer 7.x
- Microsoft Internet Explorer 8.x

At this release, the supported operating systems are as follows:

- Microsoft Windows 7
- Microsoft Windows XP Professional

Note

You must first install QuickTime for viewing live video normally.

QuickTime Settings(Optional)

If the IP of client computer doesn't belong to the same network as that of the ADST-E1, configure QuickTime as the followings for viewing Live Video normally.

Procedure 3-1 QuickTime Configuration

Step	Action
------	--------

- | | |
|---|--------------------------------|
| 1 | Open QuickTime Player . |
|---|--------------------------------|

- 2 Select **Edit->Preference->QuickTime Preference...** to open **QuickTime Preferences** window, as shown in Figure 3-1 QuickTime Preferences .

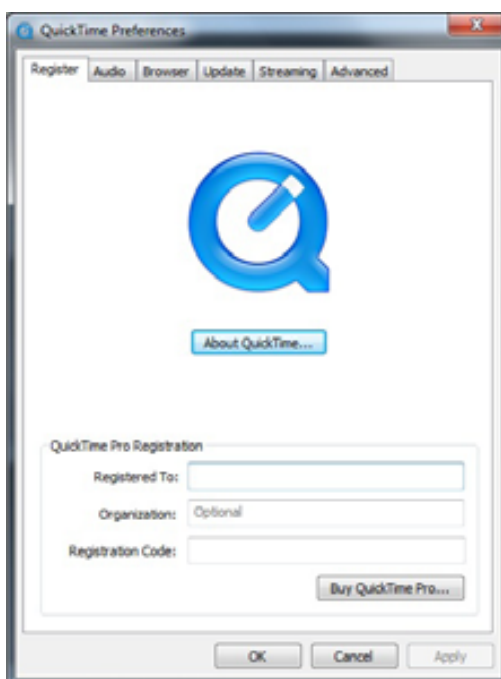


Figure 3-1 QuickTime Preferences

- 3 Click **Advanced** tab and select **Custom...** from the **Transport Setup** drop-down list in the **Streaming** pane. The **Streaming Transport** dialog pops up, as shown in Figure 3-2 QuickTime Preferences-Streaming Transport .

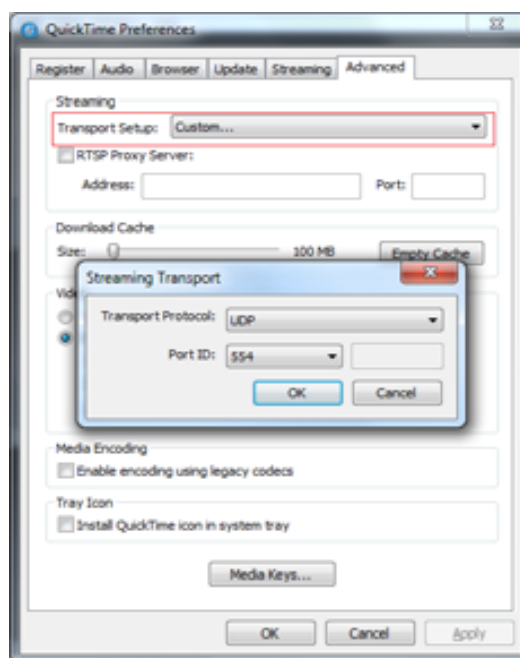


Figure 3-2 QuickTime Preferences-Streaming Transport

- 4 Select **UDP** in the **Transport Protocol** drop-down list and set PortID as 554.

- 5 Click **OK** to close the **Streaming Transport** dialog box.
- 6 Click **Apply** to put your settings into effect.
- 7 Click **OK** to finish setting.

- End -

Users Introduction

3

Three levels of user access available are Administrator, Operator and Viewer.

The following options are supported for administrator:

- Live Video—to view live video, adjust image parameters and operate PTZ.
- Video/Audio—to set video and audio parameters, configure OSD and mask privacy.
- Alarm—to configure alarm and its triggers and action
- Network—to configure network parameters.
- PTZ control—to configure PTZ control parameters.
- Storage—to configure and manage storage..
- System—to configure system parameters, including user management.
- Language switch
- Login/Logout

The following options are supported for operator:

- Live Video—to view live video, adjust image parameters and operate PTZ.
- Video&Audio—to set video and audio parameters, configure OSD and mask privacy.
- Alarm—to configure alarm, trigger and action.
- Network—to configure network parameters.
- PTZ control—to configure PTZ control parameters.
- Storage—to configure and manage storage.
- System—to configure system parameters, excluding user management.
- Language switch
- Log in/out

The following options are supported for viewer:

- Live Video—to view Live Video, adjust image parameters adjusting and operate PTZ.

Login & Logout

Login to the ADST-E1 Web Page

Procedure 3-2 Logging into the ADST-E1 Web Configuration Page

Step	Action
------	--------

- 1 Open IE browser in the client computer. Type the IP address of the ADST-E1 in the Address bar and Press Enter key to pop up the login page, as shown in Figure 3-3 Login Page (Chinese) or Figure 3-4 Login Page (English) . The default IP address for ADST-E1 is 192.168.0.100.



Figure 3-3 Login Page (Chinese)



Figure 3-4 Login Page (English)

- 2 Select the appropriate language. English and Chinese are available.
- 3 Enter the User Login Name in the **Username** field and password in the **Password** field.
- 4 Click **Enter** to open Web page in the language selected. The web page varies according to the access right of the user.

Note

For Administrator, the default username/password is admin/admin; for operator, the default username/password is operator/operator; for viewer, the default username/password is viewer/viewer.

Log out from the ADST-E1 Web Page

Click the **Logout** button on the top right of the screen to logout.

Default Language Configuration

You can change the default language for ADST-E1 in the Web Configuration page. The languages supported are:

- English
- Chinese

In any Web page of the ADST-E1, click the Chinese or English on the top right of the screen to change the Web page with the language selected.

3

Web Page Introduction

ADST-E1 Web page is as shown in Figure 3-5. Click any of the menu entries to open the appropriate configuration page.



Figure 3-5 Web Page

The hierarchical structure of the Menu is shown in Table 3-6, "Menu Navigation" .

Table 3-6 Menu Navigation

Main Menu	Option	Description
Live Video	Live Video Setting	to configure image parameters, switch stream profile and take snapshot.
Video&Audio	OSD	to configure OSD parameters.
	Audio	to configure audio parameters.
	Video H264	to configure parameters for video H264.
	Video MJPEG	to configure parameters for video MJPEG.
Alarm	Privacy Mask	to configure privacy mask.
	External-Input	to configure parameters for external-input and output.
	Trigger&Action	to configure trigger and action.
Network	IP Address	to configure network parameters.
	RTP&RTSP	to configure RTP and RTSP port, as well as multi-cast parameters.
PTZ		to configure PTZ control parameters.
Storage	Record Management	to configure storage parameters.
	Disk Management	to view disk usage, format or eject disk.
System	Status	to view status.
	User	to configure username and password.
	Log	to view log.
	Update	to update device.
	Maintenance	to maintain device.
	Date&Time	to configure date and time.

Web Configuration

The Web page contains the following settings for configuration and management: Live View, Video/Audio, Alarm, Network, PTZ, Storage and System.

This chapter describes how to configure ADST-E1 with the built-in Web configuration. Before connecting to Ethernet or VideoEdge4.0, ADST-E1, as a independent device, can be configured with Web page.

Live View

Live View can be used to configure image parameters of the live video and also to view the video standard of the camera connected.

Configuring Image Parameters

Procedure 4-3 Configure Image Parameters

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.

- 2 Select **Live Video** from the Web Main Page to pop up a configuration subpage of **Live Video** on the right, as shown in Live Video Settings. Configure video parameters in this page, which will take effect right away.



Figure 4-1 Live Video Settings

- 3 **Video Standard** field shows the video standard of the camera connected currently.
- 4 Select a stream profile from **StreamProfile** drop-down list. Two profiles are available: H.264 and MJPEG. Specific parameters for Profile can be set in **Video&Audio/Video H.264** and **Video&Audio/Video MJPEG**.
- 5 Image setting parameters:
 - Brightness - drag the slide to adjust the brightness or enter value directly in the right Value pane. Value range is 1~128.
 - Contrast - drag the slide to adjust the contrast or enter value directly in the right Value pane. Value range is 1~128.
 - Saturation- drag the slide to adjust the saturation or enter value directly in the right Value pane. Value range is 1~128.
- 6 Click **Reset to Default** button to restore default settings.

- End -

Snapshot

If USB or SD has been selected as storage disk in Storage/Record subpage and the appropriate U-disk or SD card has been inserted, a snapshot can be made for the current video in the Live Video page.

Procedure 4-4 To Capture an Image

Step	Action
------	--------

- | | |
|---|--|
| 1 | Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page. |
| 2 | Select Live Video from the Web Main Page to pop up a configuration subpage of Live Video on the right, as shown in Live Video Settings. |

- 3 When the video to be captured occurs, click the **Snapshot** button to save the current image in U-disk or SD card. It is saved in the adSnapshot Folder in root directory.

Note

The image captured is the MJPEG stream. The image size is the same as the MJPEG resolution set currently.

- 4 If it is successfully saved, a popup dialog box appears, as shown in Figure 4-2 Snapshot Succeed .



Figure 4-2 Snapshot Succeed

If snapshot fails for not connecting USB-disk or SD card, a popup dialog box appears, as shown in Figure 4-3 Snapshot Error , indicating there is a snapshot error.



Figure 4-3 Snapshot Error

Stop&Mute

Right click in the live view video playing area, select **Stop** to stop live view or select **Mute** to turn off the sound.

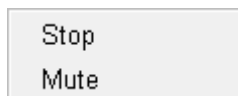


Figure 4-4 Stop & Mute

Note

Some changing operation will cause to refresh ActiveX. Audio will be reimported after refreshing.


PTZ

If PTZ control cable is connected and PTZ control parameters are set in the PTZ menu, you can realize PTZ control in **Live Video** page. Refer to for control cable connections and refer to PTZ Control for PTZ control parameters configuration.

The following describe how to realize PTZ control in **Live Video** page.

Procedure 4-5 PTZ Control

Step	Action
------	--------

- 1 Click  on the live video to open the PTZ control interface as shown below.

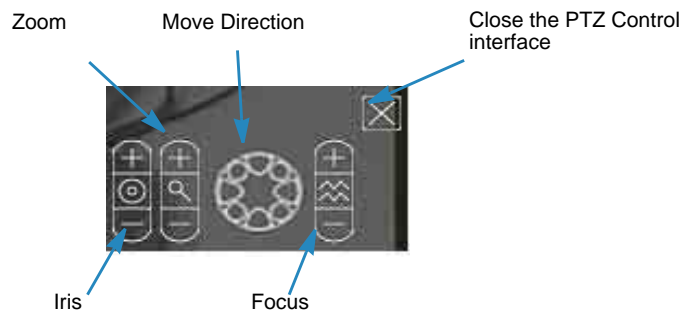

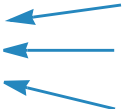

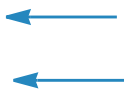

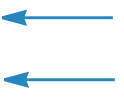




Table 4-7 PTZ Functions

Iris			Open
			Auto iris
			Close
Zoom			In
			Out
Focus			Near
			Far
Pan/Tilt Movement			Pan/Tilt

Video & Audio

Video & Audio menu is mainly used for configuring video, audio coding parameters, OSD and privacy mask.

OSD Configuration

Step	Action
------	--------

- 1 Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.

- 2 Select **Video&Audio/OSD** from the Web Main Page to pop up a configuration subpage of OSD on the right, as shown in Figure 4-5 OSD .

Figure 4-5 OSD

- 3 Select **Enable** of **Enable Time** radio box to display time and select time format needed from the **Formates** drop-down list; select **Disable** of **Enable Time** radio box to disable time display.
- 4 Select **Enable** of **Enable Text** radio box to display text and type the text content in the **Text** field. Select **Disable** of **Enable Text** radio box disable text display.
- 5 Select OSD align formate from the **Align Format** drop-down list. The available value is **Top** and **Bottom**.
- 6 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

- End -

Audio Parameters Configuration

Procedure 4-6 To Configure Audio Parameters

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.

- 2 Select **Video&Audio/Audio** from the Web Main Page to pop up a configuration subpage Audio on the right, as shown in Figure 4-6 Audio ..

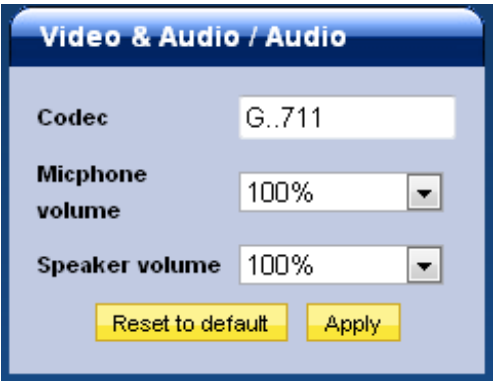


Figure 4-6 Audio

Table 4-8 Audio Parameter Explanation

Parameter	Range	Explanation
Codec	G.711	To display the name of audio stream. Read only.
Input Volume	0~100%	To set volume for input audio. The default is 50%.
Output Volume	0~100%	To set volume for output audio. The default is 50%.

- 3 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

Video H264 Configuration

Procedure 4-7 To Configure Video H264

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.

- 2 Select **Video&Audio/Audio** from the Web Main Page to pop up a configuration subpage of Video H264 on the right, as shown in Figure 4-7 Video H264 .

Figure 4-7 Video H264

Table 4-9 Video MJPEG Parameters Explanation

Parameters	Range	Explanation
Stream Name	H264	To display the name of H264 stream, which is shown in the Stream Profile in Figure 4-1 Live Video Settings . Read only.
Codec	H264	To display coding formate used. Read only.
Resolution	D1, 4CIF, 2CIF, CIF, VGA, QVGA	To set image resolution. Note: The stream will be cut off when the resolution is changed. The client must be reconnected.
I Frame Rate Interval	2~60	To set I frame interval.
Bit Rate (kbps)	128~4000	To set the maximum bandwidth for video.
VBR/CBR	VBR or CBR	To set control modes. VBR means relaxed rate control that overall quality gives more importance. CBR means stricter rate control to meet bitrate.
Frame Rate	1~30/25	To set frame rate.

- 3 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

- End -

Video MJPEG

Procedure 4-8 To Configure Video MJPEG

Step	Action
------	--------

- 1 Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.

- 2 Select **Video&Audio/Audio** from the Web Main Page to pop up a configuration subpage of Video MJPEG on the right, as shown in Figure 4-8 Video MJPEG .

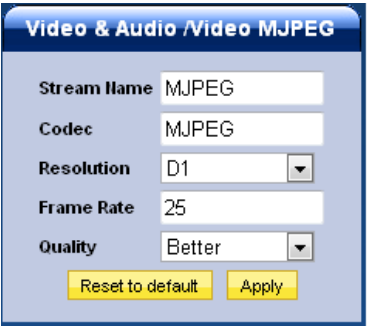


Figure 4-8 Video MJPEG

Table 4-10 Video MJPEG Parameters Explanation

Parameters	Range	Explanation
Stream Name	MJPEG	To display the name of MJPEG stream, which is shown in the Stream Profile in Figure 4-1 Live Video Settings . Read only.
Codec	MJPEG	To display codec used. Read only.
Resolution	D1, 4CIF, 2CIF, CIF, VGA, QVGA	To set image resolution.
Frame Rate	1~ 25	To set frame rate.
Quality	Best, Better or Good	To set image quality.

- 3 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings

Privacy Mask

Procedure 4-9 To Configure Privacy Mask

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page

- 2 Select **Video&Audio/Privacy Mask** from the Web Main Page to pop up a sub-configuration subpage of **Privacy Mask** on the right, as shown in Figure 4-9 Privacy Mask



Figure 4-9 Privacy Mask

- 3 To create a new privacy mask:
 - a Click **New** with default setting of the new privacy mask appears below.
 - b Enter a name for the new privacy mask in **Mask Name** field.
 - c In live video, draw a rectangle area to be masked by dragging the cursor.
 - d Click **Mask Color** frame to popup a color dialog box. Select color for the new privacy mask.
 - e Click **Save** to save the settings.
- 4 To edit an existed privacy mask:
 - a In live video, select an existed privacy mask to be edited. The property of the privacy mask appears on the right subpage.
 - b Change the name in **Mask Name** field.
 - c Change the color using **Mask Color** frame.
 - d Click **Save** to save the settings.
- 5 To delete an existed privacy mask:
 - a In live video, select an existed privacy mask to be edited.
 - b Click **Delete** to delete the privacy mask selected.
- 6 Click **Clear All Mask** if all privacy masks are to be deleted.

Alarm Configuration

Alarm menu is used to configure status for external input and output, as well as triggers and actions.

External-Input Configuration

External-Input configuration is used to set status for external alarm input and status as external alarm is triggered. It also can set delay time for external alarm input keeping effective.

Procedure 4-10 To Configure External-Input

Step	Action
------	--------

- | | |
|---|--|
| 1 | Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page |
| 2 | Select Alarm/External-Input from the Web Main Page to pop up a configuration subpage of External-Input on the right, as shown in Figure 4-10 External Input . |

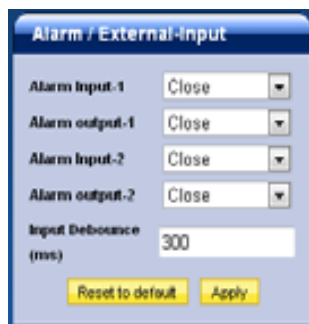


Figure 4-10 External Input

- | | |
|---|--|
| 3 | Select status needed from the Alarm Input-1 drop-down list. The available options are : Open and Close . The default is Close . |
| 4 | Select status needed from the Alarm output-1 drop-down list. The available options are : Open and Close . The default is Close . |
| 5 | Select status needed from the Alarm Input-2 drop-down list. The available options are : Open and Close . The default is Close . |
| 6 | Select status needed from the Alarm output-2 drop-down list. The available options are: Open and Close . The default is Close . |
| 7 | In Input Debounce(ms) field, enter time value during which the external alarm input remain effective. |
| 8 | Click Apply to enable the settings activated or click Restore to default to restore default settings. |

- End -

Trigger & Action Configuration

Trigger & Action configuration is used to set conditions to trigger alarm, the action after alarm is triggered and duration-time for action keeping effective.

Procedure 4-11 To Configure Trigger & Action

Step	Action
------	--------

- | | |
|---|---|
| 1 | Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page |
|---|---|

- 2 Select **Alarm/Trigger & Action** from the Web Main Page to pop up a configuration subpage of Action on the right, as shown in Figure 4-11 Trigger& Action .

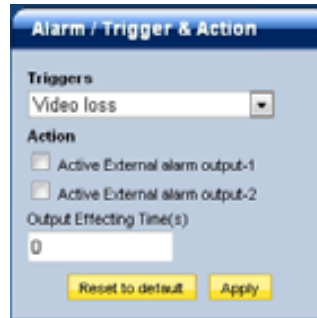


Figure 4-11 Trigger& Action

- 3 Select a trigger condition from **Triggers** drop-down list. The available options are: Video Loss, Disk Full, Disk Error, External Alarm Input-1 and External Alarm Input-2.
- 4 From **When Triggered** check box, select action(s) occur(s) when alarm is triggered.
- 5 In **Output Effecting time(s)** field, input time of duration for action triggered.
- 6 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

- End -

Network Settings

Network menu is used to set IP address and RTP& RTSP parameters.

IP Address Configuration

The following configurations are available in IP Address configuration subpage:

- DHCP
- IP Address
- Subnet Mask
- Gateway

Procedure 4-12 To Configure IP Address

Step	Action
------	--------

- | | |
|---|--|
| 1 | Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page. |
|---|--|

- 2 Select **Network/IP Address** from the Web Main Page to pop up a sub-configuration page of IP Address on the right of the screen, as shown in Figure 4-12 IP Address

Figure 4-12 IP Address

- 3 If **Enable** of the **DHCP** radio box is selected, IP address will be obtained from DHCP server. The fields below will gray out and nothing needs configuring. Go to Step 8.
If **Disable** of the DHCP radio box is selected, a pop up window appears as shown below. Click **OK** to confirm.

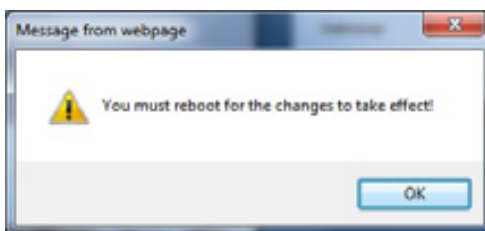


Figure 4-13 Disable DHCP Confirm

- 4 Enter the IP Address in the format xxx.xxx.xxx.xxx.
- 5 Enter the IP Mask in the format xxx.xxx.xxx.xxx.
- 6 Enter the Gateway IP in the format xxx.xxx.xxx.xxx.
- 7 Click **Apply** to enable the settings activated.
- 8 Click **Restore to default** to restore default settings.
- 9 Restart the device to activate the settings, refer to Maintenance.

RTP & RTSP Configuration

Procedure 4-13 To Configure RTP & RTSP

Step	Action
------	--------

- | | |
|---|--|
| 1 | Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page. |
|---|--|

- 2 Select **Network/RTP&RTSP** from the Web Main Page to pop up a configuration subpage of RTP/RTSP on the right, as shown in Figure 4-14 RTP & RTSP

Figure 4-14 RTP & RTSP

Table 4-11 Fields Explanations

Field/Button	Explanation
RTP Port	to set RTP port.
RTSP Port	to set RTSP port
Multicast IP Address	to set multicast address
Multicast Port	to set multicast port
Open/Close	to open/close multicast
3	Click Apply to enable the settings activated or click Restore to default to restore default settings.
4	Restart the device to activate the settings, refer to Maintenance.

PTZ Parameters Configuration

For operating PTZ, first properly configure parameters for it.

Procedure 4-14 To Configure PTZ Parameters

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.
2	Select PTZ from the Web Main Page to pop up a configuration subpage of PTZ on the right, as shown in Figure 4-15 PTZ Control .

Figure 4-15 PTZ Control

- 3 Select PTZ protocol from the **PTZ Protocol** drop-down list. The options available are:AD422, Pelco-P, Pelco-D, Transparent and PtzNull.

- 4 Select port mode from the **Port Mode** drop-down list. The options available are: RS-485-2 lines and RS-422-4lines.
- 5 Enter baut rate in **Baut Rate** field. The default is 9600.
- 6 Enter the address used by PTZ in the **Address** field. The default is 0.
- 7 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

- End -

Storage Configuration

Storage menu is used for record and storage management.

Recording Management

Procedure 4-15 To Configure Recording Parameters

Step	Action
------	--------

- | | |
|---|--|
| 1 | Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page. |
| 2 | Select Storage/Record Management from the Web Main Page to pop up a configuration subpage of Record on the right, as shown in Figure 4-16 Record . |

Figure 4-16 Record

- 3 From **Snapshot Storage Disk** radio box, select USB or SD card as the storage disk for snapshot.
- 4 From **H264 Storage Disk** radio box, select USB or SD card as the storage disk for recording.
- 5 Enter the maximum record time in File Section Time (second) field.
- 6 Set value in **Auto-overwrite percentage(%)** field. When the used space of the disk selected equals to this value, the oldest video will be overwritten by the newest one.

- 7 From **Record Enable** radio box, select **Enable** to begin recording and select **Disable** to stop recording. The record is saved in the adH264Record file of the root directory.
- 8 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

- End -

Disk Management

Only FAT32 is supported by ADST-E1.

Procedure 4-16 To Manage Disk

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.
2	Select Storage/Disk from the Web Main Page to pop up a configuration subpage of Disk on the right, as shown in Figure 4-17 Disk Management .



Figure 4-17 Disk Management

Table 4-12 Disk Management Parameters

Parameter/Button		Explanation
USB	Total Size	The total disk size of USB.
	Free Space	The free disk space of USB.
	Status	The USB disk status.
SD	Total Size	The total disk size of SD card.
	Free Space	The free disk space of SD card.
	Status	The SD card status.
Format		To format U-disk/SD card.
Eject		To safely remove U-disk/SD card by ejecting it. Warning: You must eject U-disk/SD before remove them.

- 3 The **Format** button and **Eject** button appear in the Disk subpage if USB or SD is inserted.

- Format disk selected according to the following steps:
 - a Click **Format** to pop up a confirmation dialog box, as shown in Figure 4-18 Format-Confirm .



Figure 4-18 Format- Confirm

- b Click **OK** to format and a progress bar appears, as shown in Figure 4-19 Format-Progress Bar .

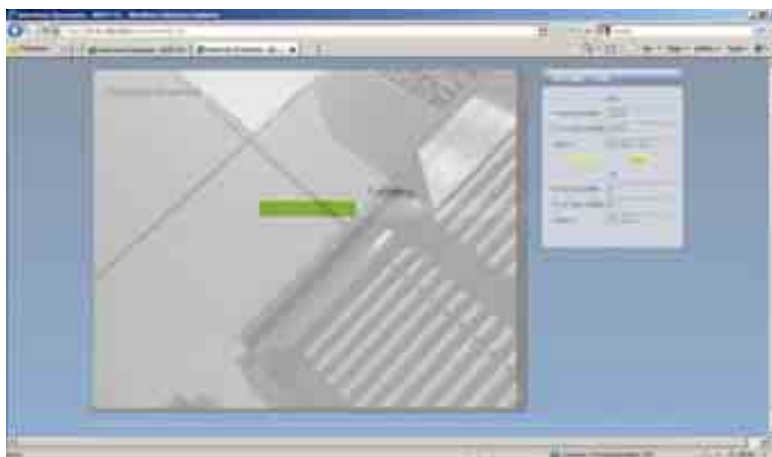


Figure 4-19 Format-Progress Bar

- Eject disk selected according to the following steps:
 - a Click **Eject** to eject the disk. A confirmation dialog box, as shown in Figure 4-20 Remove Disk , appears and the recording action on the disk stops..



Figure 4-20 Remove Disk

- End -

System Configuration

System menu is mainly used to configure user, date&time and device name, view log and device status, maintain and upgrade device.

Status Configuration

Procedure 4-17 To Configure Status

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.
2	Select System/Status from the Web Main Page to pop up a configuration subpage of Status on the right, as shown in Figure 4-21 Status .

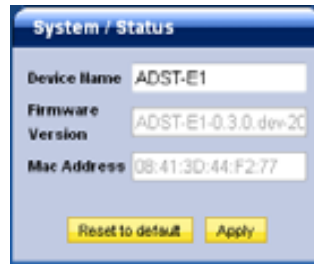


Figure 4-21 Status

- 3 Enter device name in the **Device Name** field as the only identification of the device.
- 4 Firmware version is automatically displayed in **Firmware Version** field.
- 5 Device Mac address is automatically displayed in **Mac Address** field.
- 6 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

User Configuration

Username and password of all kinds of users can be changed with **Security** settings in ADST-E1.

Note

Strongly recommend to change the password of Administrator.

Procedure 4-18 To Configure User

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.

- 2 Select **System/User** from the Web Main Page to pop up a configuration subpage of **User** on the right, as shown in Figure 4-22 User .



Figure 4-22 User

- 3 Enter the new password in the **Password** field below.
Enter the new password in the **Password** field below.
Enter the new password in the **Password** field below.

Note

Administrator, Operator and Viewer are read only.

- 4 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

- End -

Note

Only Administrator can change the password.

Log View

Procedure 4-19 To View Log

Step	Action
------	--------

- | | |
|---|--|
| 1 | Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page. |
|---|--|

- 2 Select **System/Log** from the Web Main Page to pop up a configuration subpage of **Log** on the right, as shown in Figure 4-23 Log .



Figure 4-23 Log

- 3 Click **Next** to view log on the next page; click **Previous** to view log on the previous page; enter page number in **Page** field and click **Go** to view log on the specified page.
- 4 Click **Refresh** to refresh the latest log.
- 5 Click **Close** to close Log window.

- End -

Firmware Upgrade

ADET-E1 firmware can be upgraded or downgraded as required.

Procedure 4-20 To Upgrade Firmware

- 1 Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.
- 2 Select **System/Upgrade** from the Web Main Page to pop up a configuration subpage of **Upgrade** on the right, as shown in Figure 4-24 Upgrade

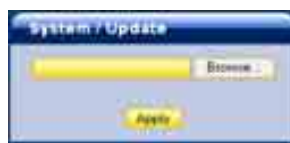


Figure 4-24 Upgrade

- 3 Click **Browse** button and use file browser to designate and select the Bin file to be used.
- 4 Click **Apply** to pop up a confirmation dialog box, as shown in Figure 4-25 Upgrde-confirm .



Figure 4-25 Upgrde-confirm

- 5 Click **OK** to start upgrade. It is not allowed to configure ADST-E1 and view video during upgrading. The upgrading process is as follows:

- a File uploading starts and a progress bar appears, as shown in Figure 4-26 File Uploading .



Figure 4-26 File Uploading

- b Updating starts when file uploading finishes and a progress bar appear, as shown in Figure 4-27 Updating .



Figure 4-27 Updating

- c After upgrading, a pop up window appears, as shown in Figure 4-27 Updating , indicating upgrading is completed and restart the device.



Figure 4-28 Upgrade Complete

- d Click **Reboot** to complete upgrading/downgrading.

Note

All configurations remain unchanged after upgrading.

Maintenance

Procedure 4-21 System Maintenance

Step	Action
1	Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.
2	Select System/maintenance from the Web Main Page to pop up a configuration subpage of Maintenance on the right, as shown in Figure 4-29 Maintenance .



Figure 4-29 Maintenance

- 3 Reboot ADST-E1
 - a Click **Reboot** to popup a confirmation dialog box, as shown in Figure 4-30 Reboot-confirm .

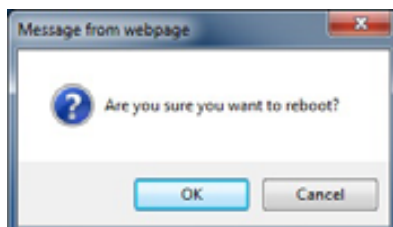


Figure 4-30 Reboot-confirm

- b Click **OK** to begin reboot. The indicating information appears, as shown in Figure 4-31 indicating information .

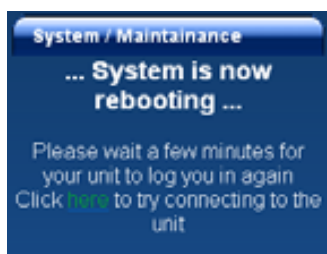


Figure 4-31 indicating information

- 4 Restore factory default, including default IP address.

- a Click **Reset** to popup a confirmation dialog box, as shown in Figure 4-32 Reset-confirmation .

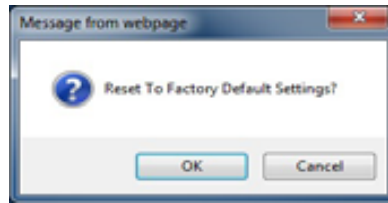


Figure 4-32 Reset-confirmation

- b Click OK. The indicating information appears, as shown in Figure 4-33 Information .

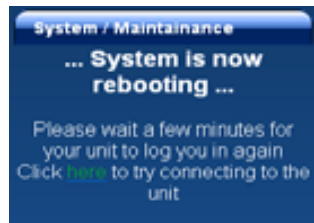


Figure 4-33 Information

- 5 Restore factory default, excluding IP address.

- a Click **Restore to default** to Popup a confirmation dialog box, as shown in Figure 4-34 Restore Confirmation .

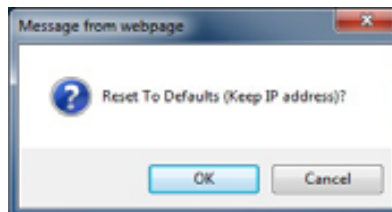


Figure 4-34 Restore Confirmation

- b Click **OK**. The indication information appears, as shown in Figure 4-35 Information .

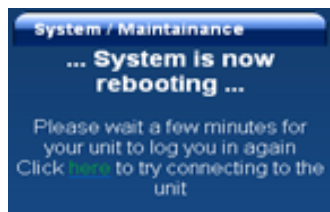


Figure 4-35 Information

Date&Time

Procedure 4-22 To Set Date & Time

Step	Action
------	--------

- 1 Login to the ADST-E1. For more details refer to Login to the ADST-E1 Web Page.
- 2 Select System/Date&Time from the Web Main Page to pop up a configuration subpage of **Date&Time** on the right, as shown in Figure 4-36 Date &Time .

Figure 4-36 Date &Time

- 3 Select a time zone from the **Time Zone drop-down** list.
- 4 Refer to Table 4-13, “Time Mode Parameters,” on page 39, select time synchronization mode and parameters

Table 4-13 Time Mode Parameters

Mode	Parameter	Explanation
Synchronize with PC Date&Time(synchronize with PC)	Date Time	Time on ADST-E1 is synchronized with PC and the current time for PC is displayed.
Synchronize with NTP server	NTP server IP Address Interval(Seconds)	Time on ADST-E1 is synchronized with NTP server. The NTP IP address and NTP synchronizing interval should be set.
Set Manually Date&Time(manually)	Date Time	To set date and time for ADST-E1 manually.

- 5 Click **Apply** to enable the settings activated or click **Restore to default** to restore default settings.

Technical Specifications

Table 5-1 Technical Specifications

Category	Specification	Details
Video	Coding Standard	H.264, MJPEG
	Resolution	D1, 4CIF, 2CIF, CIF, VGA, QVGA
	Frame Rate	Flexible setting is allowed; the maximum is 25/sec(PAL);
	Bandwidth	Configured between 128kbps~4000kbps.
	Access	Live video via Web or Victor
	Input	1 composite
	Standard	PAL
	Connector	BNC female
Audio	Code Standard	G.711u
	Code Rate	64kbps
	Sample Rate	8kHz
	Input	1 analog audio input
	Output	1 analog audio output
Power	Supply Voltage	12V DC or Power over Ethernet
	Connector	2.5mm or POE on RJ45
	Consumption	10W max. (1.0A @ 12VDC)
Physical	Operation Environment	0°C~50°C
	Storage Environment	-40°C~70°C
	Humidity	0-95%
	Size	120Lx98Wx42H(mm)
	Memory	RAM:128MB Flash:256 MB

Network	Interface	Ethernet 10-100 Base-T
	Connector	RJ45
	Protocols	Http,TCP/IP, DHCP(client)
Alarm	Alarm in	2 alarm in
	Alarm Out	2 alarm out
Storage	USB port	1 USB port
	SD slot	1 SD slot

Table 5-2 Certification and Regulations

Category	Specification	Details
Safety	UL	UL60950-1
		CSA C22.2 No. 60950-1
	TUV	EN60950-1
	CB	IEC60950-1
EMC	USA	FCC Part 15 class A
	Canada	ICES-003/NMB-003 class A
	Europe	EN55022 class A
		EN50130-4
	Australia/ New Zealand	AS/NZS CISPR22
RoHS	Compiles with European directive 2002/95/EC	